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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,377	11/18/2003	Martin James Starkey	1-24916	4378

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EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/716,377	Applicant(s) STARKEY ET AL.	
	Examiner Lynda M. Salvatore	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and accompanying remarks filed 04/03/06 and 6/05/06 have been fully considered and entered. Claims 1,3,4,7,16,21 and 22 have been amended as requested. It also noted that Applicant indicates the cancellation of claims 17-21, however, claim 21 is still pending. It appears Applicant only intends to cancel claims 17-20. Appropriate correction is required. Applicant's amendment to claims 4 and 7 are found sufficient to overcome the 112 2nd paragraph rejections set forth in sections 8-9 of the last Office Action. Applicant's amendments, however, are not found patently distinguishable over the prior art made of record and Applicant's arguments are not found persuasive of patentability for reasons set forth herein below.

Drawings

2. The drawings were received on 6/5/06. These drawings are acceptable. As such, the objection to the drawings as set forth in section 2 of the last Office Action is withdrawn.

Claim Rejections - 35 USC § 112

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,3, and 21 stand rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a composite comprising a surface resin layer, a conducting layer, a resin retention layer, and/or a reinforcement layer does not reasonably provide enablement for limitation of "said resin conducting layer further *providing* a resin retention structure" and "said resin conducting layer comprising a venting structure". Specifically, there is no disclosure enabling how the conducting layer provides a resin retention

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structure or how the resin conducting structure comprises a venting structure. It is not clear from the specification and/or claims if the resin conducting layer is made up of a separate venting structure and a separate resin retention structure or how the conducting layer allows gases to vent and provide resin retention. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Claims 2, 4-16, are rejected for their dependency on claims 1 and 3.

4. Claims 1,3,16, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With regard to claims 1,3,16 and 21 it is not clear to the Examiner how the conducting layer *provides* a resin retention structure. Further, it is not clear from the claims what, if anything, constitutes the venting structure and the resin retention structure. It is not clear from the specification and/or claims if the resin conducting layer is made up of a separate venting structure and a separate resin retention structure or how the conducting layer allows gases to vent and provide resin retention. For purposes of examination, the resin conducting layer limitation will be treated as single layer functioning to vent gases and retain resin.

Claim Rejections - 35 USC § 102/103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-16,21 and 22 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ness et al., WO 00/27632.

Applicant amended claims 1,3,21 and 22 to recite the limitations of a laminate comprising a venting structure “that allows” for the venting of gases during processing such that no voids are formed during the processing. Applicant argues that the cited prior art of Ness et al., fails to teach a laminate that includes a surface resin material and resin conducting layer, wherein the resin conducting layer both (a) comprises a venting structure that allows for venting gases during the processing of the surface material such that no voids are formed during the processing of said surface material and (b) provides a resin retention structure for retaining the surface resin material in contact with the mold surface during processing of the surface material. This argument is not found persuasive. Applicant is not forming a moulded article, but rather a laminate comprising a surface resin layer and a resin conducting layer (e.g., a woven or non-woven thermoplastic fabric). Applicant has not set forth any structural and/or chemical limitations, which would provide the resin conducting layer with the ability to allow for venting of gases during processing of the surface resin material such that no voids are formed during the processing the surface resin material. Presently, in view of the outstanding 112 1st and 2nd paragraph rejections set forth above, only the final product of a laminate comprising a surface resin material and a resin conducting layer (e.g., a woven or non-woven thermoplastic fabric) will be given patentable weight at this time.

The published PCT application issued to Ness et al., teach a multi-layered moulding material comprising a resin material applied to at least one fibrous layer (abstract). Ness et al., further disclose larger multi-layer structures having fibrous layers attached to film layers (page 4, 5-10 and figure 2). Suitable fiber layers may be in the form of woven fabrics and chopped or continuous mats (page 7, 19-25). Suitable fibers include glass, carbon and polymeric (page 7, 8-

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15). With regard to claim 2, Ness et al., teach a lightweight fibrous layer weighing 20g/square meter (page 13, 27). In this instance, the Examiner considers the resin material sufficient to meet the limitations of the claimed surface material. The Examiner also considers the fibrous layers sufficient to meet the limitations of the claimed resin conducting and reinforcement layers. With specific regard to claim 4, since the Examiner is interpreting the resin conducting layer as comprising a single layer, it is the position of the examiner that a woven fabric is sufficient to meet the limitations presently set forth. With regard to claim 6, the prior art of Ness et al., does not specifically set forth the thicknesses of the individual resin film and the fibrous layers however, Ness et al., does clearly illustrate in figure 1 that the surface resin film is much thinner than the fibrous layers. As such, the Examiner considers such an illustration sufficient to meet the claimed limitations. With regard to claim 11, Ness et al., teach applying a resin gel coat to the surface of the moulding composite (page 13,5-10).

With specific regard to the “adapted to” limitations recited in claims 1, 3, 8,12 and 22, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

With regard to the “whereby” limitation in claim 22, it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127,44 CCPA 937 (1957)

With regard to the processing viscosity, glass transition temperature, and thermal expansion property limitations recited in claims 3, 9, and 10, although the prior art of Ness et al., does not specifically teach the claimed features it is reasonable to presume that such

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properties/features are inherent to the invention of Ness et al. Support for said presumption is found in the use of like materials such as resin surface layers and thermoplastic woven layers which would provide the claimed processing viscosity, glass transition temperature, and thermal expansion property features. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594

In addition, the presently claimed processing viscosity, glass transition temperature, and thermal expansion glass transition temperature features would obviously have been present once the Ness et al., composite is provided. *In re Best*, 195 USPQ at 433.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

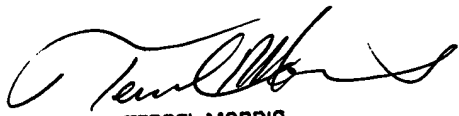
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 19, 2006

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